

Listing of Claims:

Claim 1 (Original): A method for isolating a defined quantity of a DNA target material from other material in a medium by:

- a. providing a medium including the DNA target material;
- b. providing a discrete quantity of a silica-containing solid support capable of reversibly binding a definable quantity of the DNA target material;
- c. forming a complex of the silica-containing solid support and the DNA target material by combining the silica-containing solid support and the medium;
- d. removing the complex with the DNA target material from the medium; and
- e. separating the DNA target material from the complex, whereby a defined quantity of the DNA target material is obtained.

Claim 2 (Canceled).

Claim 3 (Original): The method of claim 2, wherein the quantity of DNA target material provided in step (a) is in excess of the binding capacity of the particles.

Claim 4 (Original): The method of claim 2, wherein the silica magnetic particles are porous.

Claim 5 (Original): The method of claim 2, wherein the silica magnetic particles are nonporous.

Claims 6-20 (Canceled).

Claim 21 (Original): The method of claim 20 wherein the quantity of DNA target material provided in step (a) is in excess of the binding capacity of the particles.

Claims 22-26 (Canceled).

Claim 27 (Original): The method of claim 20 wherein the silica magnetic particles are porous.

Claim 28 (Original): The method of claim 20 wherein the silica magnetic particles are nonporous.

Claims 29-31 (Canceled).

Claim 32 (Original): A kit for isolating a defined quantity of a DNA target material from a medium, the kit comprising:

a discrete quantity of silica magnetic particles suspended in an aqueous solution in a first container, wherein the particles have the capacity to reversibly bind a definable quantity of the DNA target material from the medium for a sample type.

Claim 33 (Original): The kit of claim 32 wherein the sample type is liquid blood.

Claim 34 (Original): The kit of claim 32 wherein the sample type is blood on a solid support.

Claim 35 (Original): The kit of claim 32, further comprising a chaotropic salt.

Claim 36 (Original): The kit of claim 35 wherein the silica magnetic particles are suspended in a solution with the chaotropic salt.

Claim 37 (Original): The kit of claim 35 further comprising a wash solution.

Claims 38-39 (Canceled).

Claim 40 (Original): A method of isolating DNA target material from a solid support, the method comprising: contacting the solid support containing the DNA target material with a chaotropic salt solution at a temperature of about 60°C to about 100°C thereby isolating at least a portion of the DNA target material from the solid support.

Claims 41-43 (Canceled).